US005158333A

United States Patent [19]

Saville

[11] **Patent Number: 5,158,333**

[45] **Date of Patent: Oct. 27, 1992**

[54] **ADJUSTABLE HINGE ASSEMBLY**

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[21] Appl. No.: **624,019**

[22] Filed: **Dec. 7, 1990**

[30] **Foreign Application Priority Data**

Dec. 12, 1989 [GB] United Kingdom 8928081

[51] **Int. Cl.**[5] **B62D 25/10**; E05D 7/04

[52] **U.S. Cl.** **296/76**; 16/246; 16/238

[58] **Field of Search** 16/246, 238; 296/76

[56] **References Cited**

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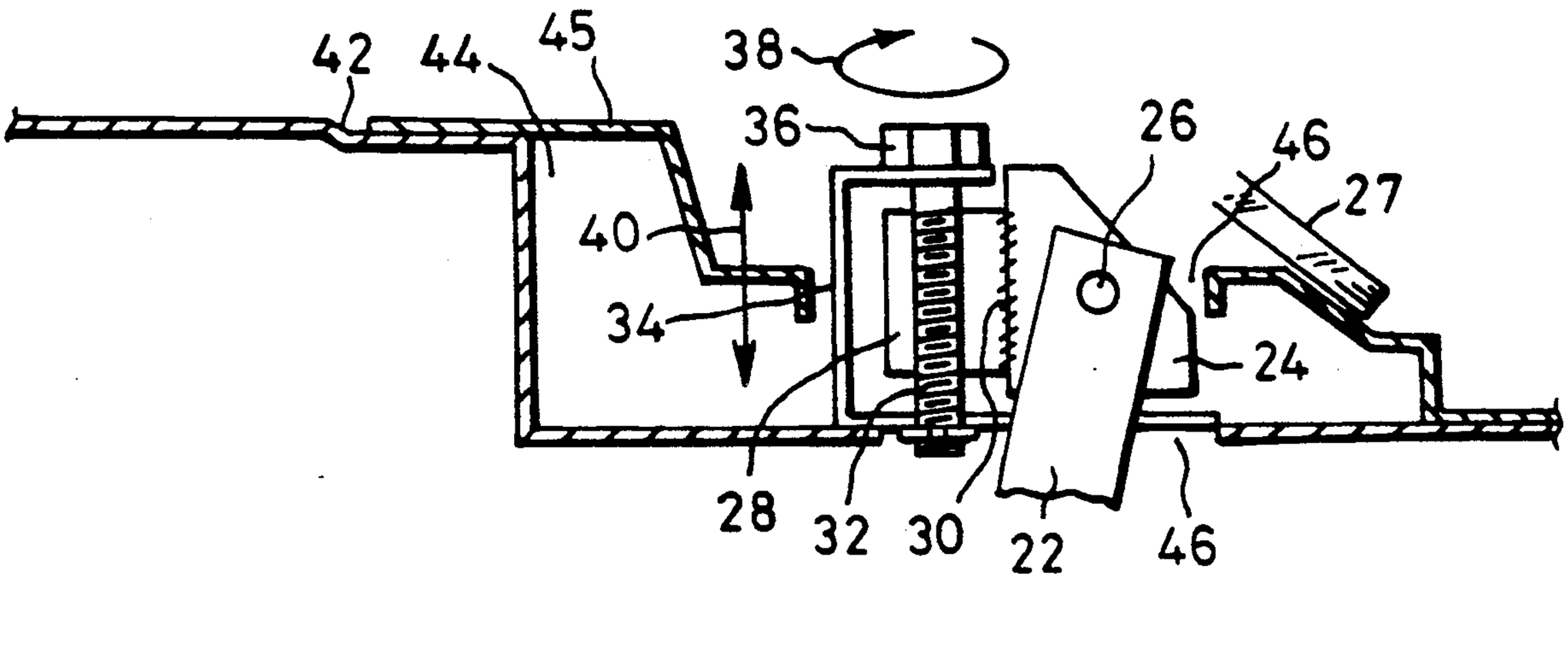
[57] **ABSTRACT**

A hinge for a vehicle body closure component such as a deck lid has a hinge pin mounted on a bracket, which bracket can itself be moved up and down by a screw mechanism to provide a fine adjustment of the vertical position of the hinge pin. The screw mechanism is accessible from outside the vehicle at the required stage of assembly so that the mechanism can be operated to provide the correct panel fit.

2 Claims, 1 Drawing Sheet



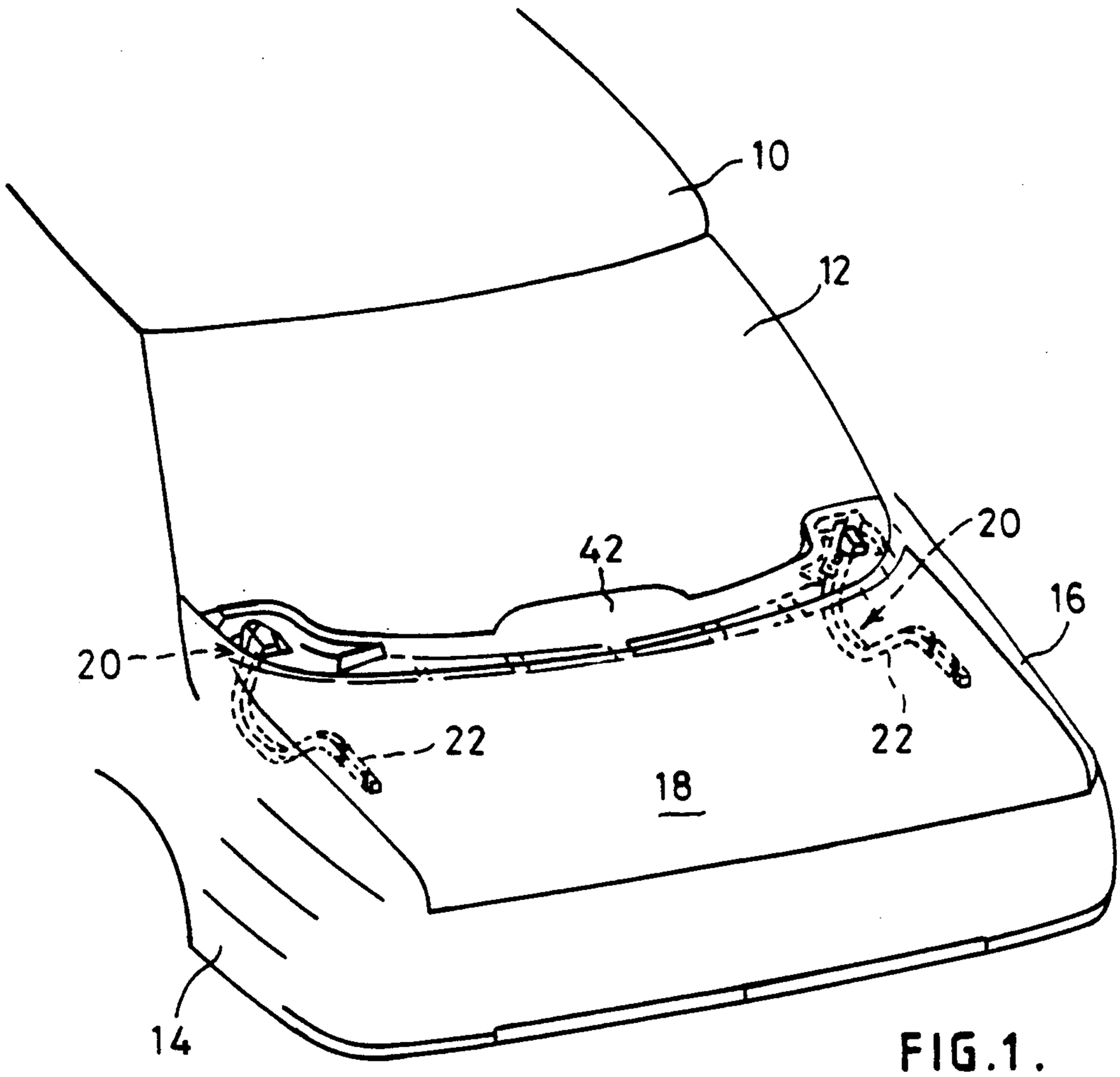
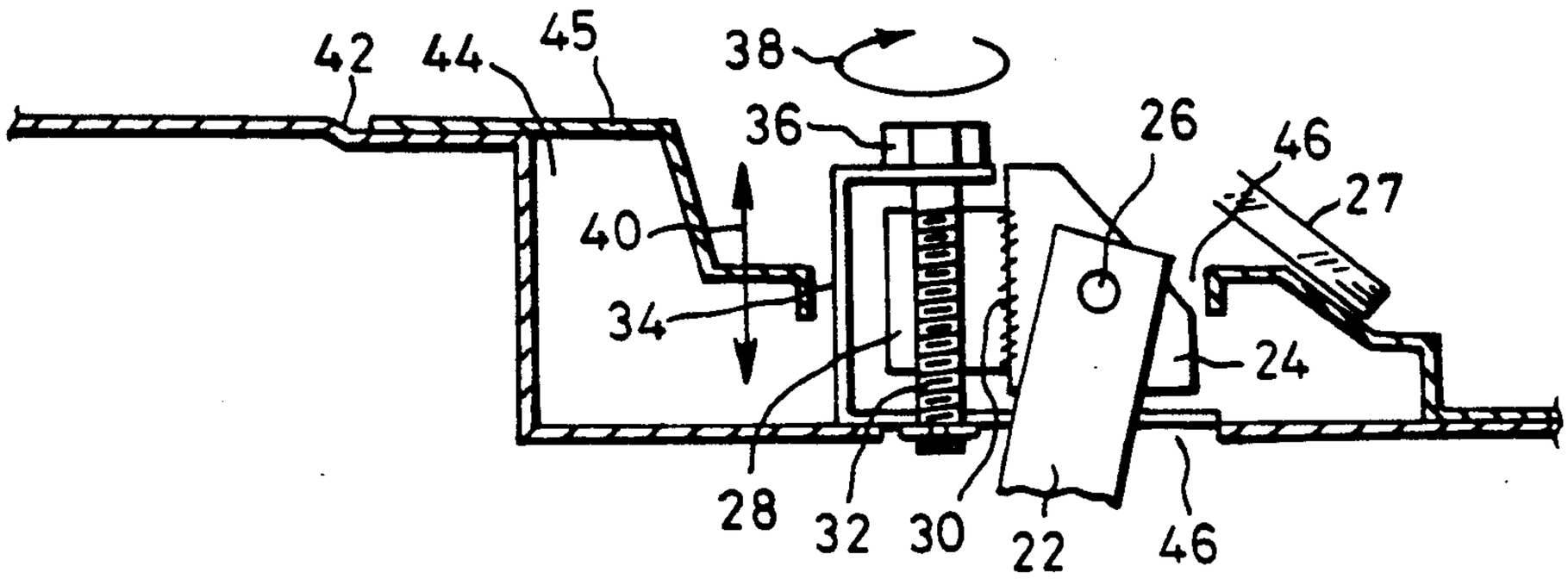

10
12
42
20
16
20
22
22
18
14

FIG.1.


42
44
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38
36
26
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34
24
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FIG.2.

ADJUSTABLE HINGE ASSEMBLY

BACKGROUND OF THE INVENTION

1. Field of the Invention

This invention relates to an adjustable hinge assembly suitable for mounting a body closure component to a vehicle body. For example, the hinge can be used to mount a deck lid to a vehicle body.

2. Disclosure Information

In mounting hinged body closure components to a motor vehicle body, it is necessary to carefully control the gap between the outer surface of the closure component and the outer surface of the adjacent body panels. It is known to provide one or both of the hinge leaves with elongated holes so that the position of the body closure component can be finely adjusted before bolts, which pass through the elongated holes, are tightened. However, it is usually difficult to obtain access to these bolts because they will normally be concealed beneath the closure component which they mount.

SUMMARY OF THE INVENTION

According to the present invention, there is provided a hinge assembly comprising a pivot plate, a hinge arm pivoted to the pivot plate, a threaded nut fixed to the pivot plate and a threaded bolt which is rotatable but captive in a base member and which passes through the threaded nut so that rotation of the bolt moves the pivot plate along the axis of the bolt.

According to a second embodiment, there is provided a motor vehicle having a deck lid attached to the vehicle by means of a hinge assembly as set forth above, wherein the hinge arms are secured to the underside of the deck lid and the base members are mounted on a parcel shelf framework in the passenger compartment of the vehicle, with the threaded bolt having a bolt head which is accessible through the rear window opening, before the glass is put in place, in order that the up and down position of the pivot plate can be adjusted from outside the vehicle after the deck lid has been installed.

Preferably the base members are concealed by trim panels once the vehicle assembly has been completed.

BRIEF DESCRIPTION OF THE DRAWINGS

The invention will now be further described by way of example with reference to the accompanying drawing in which:

FIG. **1** is a schematic perspective view of the rear of a vehicle body; and

FIG. **2** is a vertical cross-section through the rear parcel shelf of the vehicle body shown in FIG. **1**.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

The vehicle body as shown in FIG. **1** has a roof **10**, a rear window aperture **12**, rear fenders **14** and **16** and a deck lid **18**. The deck lid is hinged to the body by hinge

assemblies generally designated **20** so that the deck lid **18** can be hinged open.

As can be seen in FIG. **2**, each hinge assembly **20** consists of a swan-neck hinge arm **22** which has an outer end which can be bolted to the underside of the deck lid **18**. The inner end of the arm **22** is pivoted to a pivot plate **24** on a pivot axis **26**. When the deck lid **18** is opened and closed, the lid pivots about the axis **26**.

When the lid is initially mounted on the arms **22** and is then put into a closed position the outer surface of the deck lid **18** skin panel may not be precisely flush with the surfaces of the adjacent body panels. In order to bring these surfaces flush, it is necessary to raise or lower the pivot axis **26**. So as to allow this to be done, the pivot plate **24** has a threaded nut **28** welded to it at **30**, and this nut is threaded onto a bolt **32**. The bolt **32** is rotatable but captive in a base member **34**. A bolt head **36** is accessible at the top of the base member and can be rotated as indicated by the arrow **38** to raise or lower the pivot plate **24** as indicated by another arrow **40**.

Because the bolt head **36** is readily accessible at the top of a parcel shelf **42** inside the window opening **12** before the rear window glass **27** is installed, a tool can easily be placed on this bolt head and the height of the deck lid **18** relative to the surrounding bodywork can be easily adjusted.

FIG. **2** shows the parcel shelf **42** having a depression **44** to house the hinge **20** and an upper back panel **45**. Apertures **46** are cut in the shelf and in the panel **45** to allow the hinge arm **22** to pass through and to accommodate the bottom end of the bolt **32**. The base member **34** can be bolted or welded or otherwise fixedly secured to the top of the parcel shelf depression **44**.

During a later stage of vehicle assembly, the parcel shelf assembly is preferably covered with a trim panel which will conceal the upper ends of the hinges.

This invention provides an easy and accurate way of adjusting the Panel fit of a hinged body closure component at a convenient stage during vehicle body assembly.

I claim:

1. A motor vehicle having a deck lid attached to the vehicle adjacent a parcel shelf frame work positioned interiorly of a rear window opening of the vehicle by means of a hinge assembly comprising a pivot plate, a hinge arm pivotably mounted to the pivot plate, a threaded not fixed to the pivot plate and a threaded bolt which is rotatable but captive in a base member and which passes through the threaded not so that rotation of the bolt alone moves and fixes the pivot plate along the axis of the bolt wherein the hinge arm is secured to the underside of the deck lid and the base member is mounted on the parcel shelf framework with the threaded bolt having a bolt head which is accessible through the rear window opening, before the glass is put in place, in order that the up and down position of the pivot plate can be adjusted from outside the vehicle after the deck lid has been installed.

2. A motor vehicle as claimed in claim **1**, wherein the base member is concealed by trim panels once the vehicle assembly has been completed.

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